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California Air Resources Board 1001 I Street Sacramento, CA 95814

Comments by the Sacramento Municipal Utility District on Proposed Amendments to the Low Carbon Fuel Standard Regulation

The Sacramento Municipal Utility District (SMUD) appreciates the last two years of work by dedicated Board staff that has led to the Proposed Amendments to the Low Carbon Fuel Standard (LCFS) Regulation (Proposed Amendments). SMUD supports the Proposed Amendments in large part and continues to implement innovative programs to move the economy of the Sacramento region toward a zero-emission transportation future. SMUD appreciates the opportunity to provide CARB Board and staff with the following comments on the electricity-related provisions of the Proposed Amendments.

Residential EV Charging (§ 95843(c)(1))

SMUD supports continuation of the Electricity Distribution Utility (EDU) as the credit generator for the base electric vehicle (EV) charging credits. SMUD opposes proposals to have automakers earn residential base credits. SMUD supports the amendments proposed by staff to enable EDUs to continue to earn LCFS credits for residential charging estimated by staff (residential base credits). SMUD believes that this is best methodology to provide the LCFS credit value back to the EV drivers in a manner that helps increase EV adoption in the most equitable form, and provides the flexibility to meet local market needs and address multiple adoption barriers.

SMUD currently returns the residential base EV electricity credit value back to the customers through: 1) a one-time upfront cash incentive to charge free for two years (\$599) or a free 240-volt Level Two EVSE unit; 2) investing in the expansion of public charging infrastructure in our service territory; 3) a consumer-forward advertising and outreach program aimed at raising knowledge of and interest in electric vehicles among our customers; and 4) innovative programs to incent workplace charging, fast-charging infrastructure, and electric transportation in disadvantaged communities. SMUD's one-time upfront cash/value incentive, advertised as "Free fuel for two years", is available to all our customers irrespective

of what make and models of EV's and plug-in electric vehicles (PHEV's) they are purchasing. Data from our program indicates that approximately 73% of our customers purchasing or leasing PHEVs are participating in our incentive program. We feel that this provides the best equity for our community and provides program consistency since every customer in SMUD's service territory can participate in the program and no specific make or model of electric vehicle is favored.

In addition to an upfront incentive, SMUD believes that LCFS credit revenue earned through residential base credits also has benefits in developing and incenting charging infrastructure to support the Governor's goal of 5 million zero-emission vehicles (ZEV) by 2025. (EO B-48-18) Currently, the California Energy Commission (CEC) forecasts between 1.5 million and 2.4 million ZEVs will be on California roads by 2025. However, the CEC also forecasts that up to 175,000 public charging stations will be needed to support just 1.5 million ZEVs, which is far below the 5 million ZEV goal. Thus, there is a critical need for more charging infrastructure. The EDUs are in a unique position to assess where charging infrastructure should be located and to provide public access to it. We believe this is especially important to help grow the used EV market and also provide charging options in disadvantaged communities that lack provisions for vehicle charging.

Non-Residential EV Charging (§ 95843(c)(2))

SMUD is concerned that the proposed rule to allow any entity to generate credits from non-residential charging will confuse our customers and will not necessarily lead to greater capture of credit value in the long term. The Proposed Amendments remove a provision that empowers property owners to be first in line to receive credit for transportation fuel supplied through non-residential EV charging. The rationale for the proposed removal is to enable the capture of more credits than are currently claimed by allowing any entity with fueling supply equipment (FSE) data access to claim the credits.

However, this rationale is mitigated to some extent because the price of credits is now over \$100/credit and CARB predicts the price to remain above \$100 through 2030. With a higher credit value, entities that are investing in EV charging, such as EDUs and EVSE owners, will be highly motivated to capture all the credits they can.

The proposed new structure sets the stage for a number of implementation problems. First, it is a recipe for conflict. The proposed rule grants the right to generate credits based solely on who registers the FSE first. While first-in-time rights in real estate or secured property have worked historically in other contexts, the law limits who may claim those rights to parties with an ownership interest in the property. Property law does this for the obvious reason that it would be

fundamentally unfair for a third party to appropriate ownership of someone's property just because they manage to file a claim before someone else.

Second, a first-to-file rule could play into the hands of parties who might obtain consent from EVSE owners to claim the credits without fully informing them of the market value of the credit. This approaches fraudulent type behavior with little or no penalty to the party claiming the credits. Furthermore the process to re-register the FSE to the EVSE owner would cause a further loss of credits and would not be easy for normal property owners. SMUD has a strong interest in preventing fraud and providing clear notice to our customers of the potential value of LCFS credits.

Third, SMUD believes that it is inappropriate for entities who have not invested in creating the low carbon fuel, in building the charging station, or in providing another piece of the charging supply chain, to claim the credit value. EDUs also have the important obligation to use credit proceeds to benefit current and future EV customers. Opening up credit generation to entities without a vested interest in promoting the State's policies in reducing GHG emissions from transportation is not in accord with the basic goals of the Regulation.

Fourth, SMUD notes that the Proposed Amendments preserve current policy of preference and priority for mobile freight equipment such as forklifts, although SMUD does not completely endorse the new structure (which we will comment upon below). However, the point is that staff has seen the wisdom in maintaining a scheme that assigns authority to a specific party instead of allocating the right to generate credits to whomever acts first. SMUD recommends that the Regulation should maintain as much consistency as possible across electrification applications, and an important consistency is a priority as to who can generate credits.

Lastly, the current structure essentially rewards data reporting over fuel delivery. Given that the Low Carbon Fuel Standard is a fuel regulation, prioritizing data reporting to claim the credits over the actual fuel production and delivery misplaces that value away from customers and EDU ratepayers who pay for delivery of low carbon electricity. Electricity customers and ratepayers have been the real enablers of transportation electrification by their support of grid development as funded through normal electricity bill payments. Without the past investment in grid development the ability to electrify transportation applications would be in question. Recent policy discussions around the LCFS have overlooked the benefits of that investment. The fact that EDU's are directed to support past and future customers in transportation electrification is the only vestige left of returning the LCFS back to the customers and ratepayers who have actually enabled this market to flourish. With regard to data reporting, the fact that much of the electricity being used for transportation electrification is not metered separately is a policy choice to keep the cost of electricity low to meet customer demands and also helps grow the market for EVs through lower electricity rates.

The better course is to keep a customer hierarchy, beginning with the EVSE owner. Arguably the EVSE owner deserves priority because that entity has invested in the fuel supply equipment and past and future improvements to the grid. If the EVSE owner has not taken advantage of its first-in-line priority within some period of time, then the EDU should be the next in line because the EDU has generated and delivered the low carbon electricity to the non-residential charging station and is obligated to return that value back to their customers. Following the EDU, other parties who contribute value to building out charging infrastructure should follow, such as data service providers. Whatever the priority, SMUD believes a hierarchy is necessary to avoid conflict and to promote further investment in badly needed charging infrastructure.

Electric Forklifts and Other Mobile Freight Equipment (§ 95843(c)(4))

SMUD recommends that the Proposed Amendments maintain the current regulatory scheme whereby the EDU is the default credit generator unless the forklift fleet operator opts in. The Proposed Amendments would make several changes to the current Regulation for electric forklifts, in addition to expanding the provision to other freight and goods movement equipment. SMUD believes that the current scheme would capture more credits and grant the right to generate credits to the entities that are most needed to invest in electrification of goods movement systems.

The existing rule has the advantage of designating a default party for generating credits, and given CARB's current process for calculating and awarding forklift credits to EDUs, those credits are sure to be created and monetized for future charging infrastructure. The current rule removes the uncertainty introduced by the Proposed Amendments, which requires the fleet owners to take affirmative steps to opt in to become credit generators. Because the credit value from one operation may not be great, small businesses may not spend the time and money to opt in (whereas the EDU can consolidate fleet electrification across its service territory).

In addition, SMUD created an incentive program in 2017 to support the electrification of goods movement systems. SMUD's Electric Forklift Incentive Program grants \$1,000 to the forklift distributor and \$2,000 to the fleet owner, because both parties must cooperate to electrify fleets. The change in the Proposed Amendments overlooks this supply chain. SMUD has plans to use the credits and data obtained in return for these incentives to propagate additional electrification, just as intended by the Regulation. However, the Proposed Amendments will bring into question SMUD's program just as it is beginning to take root. While SMUD supports needed

changes to the Regulation, staff should not change the rules before EDUs are given time for their new electrification programs to work.

Electric Transport Refrigeration Units (eTRU) (§ 95843(c)(5))

SMUD supports consistency of the scheme for credit generation for eTRUs with other electrification applications as much as possible. However, because eTRU requires capital investment in substantial infrastructure, the credits should not be assigned to a default party, as with the current forklift rule. Instead, SMUD supports assigning the first right to generate credits to the entity that makes the investment. That party would likely be either the eTRU capable facility owner or the EDU.

New EER Values for Electricity (Table 5)

SMUD supports the updated and new EER values in Table 5 for vehicles and other equipment using electricity as a primary fuel. SMUD would like to commend staff for the test data collection and analysis to establish all the new EER values for such a wide array of applications as shown in Appendix H.

Green Tariff programs (§§ 95486.1(c)(2)9a)(1), 95486.1(C)(1)(a), and 95488.8(i)(1))

SMUD supports the new option in the Proposed Amendments of linking nonmetered EV residential charging to EDU green tariff programs, but supports the comments of CalETC that staff should develop a simpler method for EDUs to generate credits on behalf of their ratepayers. SMUD has been a leader in utility green pricing programs for many years with its Greenergy program. Greenergy allows customers to purchase up to 100% of their power needs as Green-e certified renewable energy through a flat monthly fee on their utility bill. Greenergy has grown substantially over the years because of its low cost and simplicity.

The Proposed Amendments create a relatively complicated system of requirements to ensure that Greenergy customers who purchase low-CI electricity are the same customers who are charging EVs at home or at a participating workplace. Instead, linking customers who own or lease an EV with green tariffs should be relatively simple. The customer just needs to register the EV with the EDU with a proof of registration within some period after purchase or lease. EDUs can encourage high rates of registration through means of incentives. SMUD already has high rates of registration through our "Free fuel for two years" program. CARB can incentivize even higher rates of registration by returning low-CI credit value to EDUs so they can provide yet higher return of the value from green energy programs. In addition,

EDUs now have available new means of analyzing customer data to verify that the EV remains with the green pricing customer and charging at the residence. And because customer usage is exactly the same for incremental credits as for base credits in green tariff programs, there is no need to meter the incremental credits a second time for customers on green tariff programs.

SMUD urges staff to accept accredited EDU green pricing programs such as Greenergy and devise a simpler method of ensuring that those residential green pricing program customers indeed have EVs and generate credits from zero carbon intensity (0g/MU).

New Electricity Lookup Table Application Requirements (§ 95488.5(b))

SMUD supports the updated electricity carbon intensity look up table value of 93.42 gCO2e/MJ in Table 7-1, and the stated process to update it annually. Annual updating would reflect the rapidly evolving de-carbonization of grid electricity sources. This is especially important as more and more marginal load is supplied by renewable resources such as photovoltaic and wind power. With the current low cost of wholesale photovoltaic power, it is becoming a first choice in all power procurement options, which should help accelerate reduction in electricity carbon intensity.

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